	Process Stream Characteristics
Brief Description of Process	
	4
Flow Data	Gas stream temperature: 68 degrees F
	Moisture content: grams of water/cubic feet (ft³) of dry air
	Pressure drop range
	High: in. H <sub>2</sub> O Low: in. H <sub>2</sub> O
	Dew point temperature of process stream: degrees F
	Inlet flow rate: ACFM
Dust Collection Device	☐ Pneumatic conveyor ☐ Rotary airlock values ☐ Screw conveyors ☒ Closed container
	☐ Double dump ☐ Drag conveyor
	☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
Operating	Normal: 1.6 hours/day 5 days/week 52 weeks/year
Schedule	Maximum: hours/day days/week weeks/year



### PERMIT TO CONSTRUCT APPLICATION

Revision 0 04/02/07

IDENTIFICATION											
Company Name:	B Corporation		Facility Na	me:		acility O No.: 059-00008					
	ermit Modification yclone #5	on for Cyclones				,					
CYCLONE SEPARATOR INFORMATION											
Equipment Description											
Manufacturer:	HJ Burns Comp	pany, Inc.		Model Numb	oer:						
Dimensions	G	as out 1	É	Partic	ulate Size Di	stribution Data					
	Gas in			Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range					
	FRONT	IAI S	TOP	0.5-1.0							
	VIEW	<b></b> □ □ □	VIEW	1.0-5.0							
		1	ì	5-10							
		\		10-20							
		Ż		Over 20							
					□ Wet	⊠ Dry					
	Give dimension diagram above	ns of cyclone. (See .) 5. Z: 78		Type of Cyclone Unit	⊠ Single □ Dual	☐ Quadruple ☐ Multiclone					
	2. H: 29 in.	6. D: 72	in.	Blower	Blower horse	power: 20 hp					
	3. S:	in. 7. A: 40	in.			ate: 5,741 scfm					
	4. L: 42 in.	8. J: 12	in.		Draft: X For	ced Induced					
Design Criteria	Cyclone config	uration: 🛭 Positiv	e pressure	☐ Negative p	ressure						
Pre- Treatment Device	☐ Cyclone ☐ Precooler ☐ Preheater	☐ Knock-out cha	amber	Post- Treatment Device	☐ Bagh ☐ HEP/ ☐ Othe	8.5%					

	Process Stream Characteristics
Brief Description of Process	
	P .
Flow Data	Gas stream temperature: 68 degrees F
Flow Data	Gas stream temperature. Ob degrees i
	Moisture content: grams of water/cubic feet (ft <sup>3</sup> ) of dry air
	Pressure drop range High: in. H <sub>2</sub> O Low: in. H <sub>2</sub> O
n	Figh. III. Figo Low. III. Figo
	Dew point temperature of process stream: degrees F
Donat Callegation	Inlet flow rate:       ACFM         ☐ Pneumatic conveyor       ☐ Rotary airlock values       ☐ Screw conveyors       ☒ Closed container
Dust Collection Device	☐ Pneumatic conveyor ☐ Rotary airlock values ☐ Screw conveyors ☒ Closed container
	☐ Double dump ☐ Drag conveyor
	☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
Operating Schedule	Normal: 1.6 hours/day 5 days/week 52 weeks/year  Maximum: hours/day days/week weeks/year
Schedule	Maximum. Hours/day days/week weeks/year



# PERMIT TO CONSTRUCT APPLICATION

Revision 0 04/02/07

		10	ENTIFICAT	TION								
Company Name: QE	3 Corporation		Facility Na	me:		Facility ID No.:	059-00008					
	t Permit Modification for Cyclones Cyclone #6											
CYCLONE SEPARATOR INFORMATION												
Equipment Description												
Manufacturer:	HJ Burns Com	pany, Inc.		Model Numi	oer:							
Dimensions	G	as out	1	Partic	ulate Size D	istributio	on Data					
	Gas in		<b>∀</b> B ↑	Micron range	Particle size distribution weight %	guarai efficie	nufacturer's nteed removal ency for each cron range					
	FRONT	IAI S	TOP	0.5-1.0	2 - 100000000000000000000000000000000000							
	VIEW	<b>4</b> −D-▶ ↓	VIEW	1.0-5.0								
		1		5-10								
		\		10-20								
		Ż	Ż	Over 20								
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Type of Cyclone	□ Wet		Dry					
	Give dimension diagram above 1. B: 10 in.	ns of cyclone. (See .) 5. Z: 96	ā,	Type of Cyclone Unit	⊠ Single □ Dual		Quadruple Multiclone					
	2. H: 22 in.	6. D: 72		Blower	Blower horse	epower: 20	) hp					
	3. S:	in. 7. A: 32	in.		Design flow i	rate: 5,741	scfm					
	4. L: 36 in.	8. J: 10	in.		Draft: X Fo	rced 🔲 I	nduced					
Design Criteria	Cyclone config	uration: 🛭 Positiv	e pressure	☐ Negative p	ressure							
Pre- Treatment Device	☐ Cyclone ☐ Precooler ☐ Preheater	☐ Knock-out cha	amber	Post- Treatment Device	☐ Bag ☐ HEF ☐ Othe		rtridge					

	Process Stream Characteristics
Brief Description of Process	5,
Flow Data	Gas stream temperature: 68 degrees F
	Moisture content: grams of water/cubic feet (ft <sup>3</sup> ) of dry air
	Pressure drop range
	High: in. H <sub>2</sub> O Low: in. H <sub>2</sub> O
	Dew point temperature of process stream: degrees F
	Inlet flow rate: ACFM
Dust Collection Device	☐ Pneumatic conveyor ☐ Rotary airlock values ☐ Screw conveyors ☒ Closed container
Device	☐ Double dump ☐ Drag conveyor
	☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
Operating	Normal: 16 hours/day 5 days/week 52 weeks/year
Schedule	Maximum: hours/day days/week weeks/year



# PERMIT TO CONSTRUCT APPLICATION

Revision 0 04/02/07

-		ID	ENTIFICAT	ION								
Company Name:	B Corporation		Facility Nar	ne:		acility D No.: 059-00008						
	ermit Modificatio cyclone #6	nit Modification for Cyclones one #6										
CYCLONE SEPARATOR INFORMATION												
Equipment Description												
Manufacturer	: HJ Burns Comp			Model Numl	oer:							
Dimensions	Ga	s out 1		Partic	ulate Size Di	stribution Data						
	Gas in		B B	Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range						
	FRONT	IAI S	TOP	0.5-1.0								
	VIEW D->			1.0-5.0								
		1		5-10								
				10-20								
		Ż	C	Over 20								
		1		Type of Cyclone	□ Wet	⊠ Dry						
Ψ,	Give dimensions diagram above.)	s of cyclone. (See ) 5, Z: 96		Type of Cyclone Unit	⊠ Single □ Dual	☐ Quadruple ☐ Multiclone						
	2. H: 22 in.	6. D: 72	1999 H	Blower	Blower horse	oower: 20 hp						
	3. S:	in. 7. A: 32	N-11.			ate: 5,741 scfm ced						
	4. L: 36 in.	8. J: 10				oca 🗀 maacca						
Design Criteria	Cyclone configu	ration: 🛛 Positiv	e pressure	☐ Negative p	ressure							
Pre- Treatment Device	☐ Cyclone ☐ Precooler ☐ Preheater	☐ Knock-out cha	amber	Post- Treatment Device	☐ Bagh ☐ HEP/ ☐ Othe							

	Process Stream Characteristics
Brief Description of Process	
Flow Data	Gas stream temperature: 68 degrees F
	Moisture content: grams of water/cubic feet (ft <sup>3</sup> ) of dry air
	Moisture content: grams of water/cubic feet (ft <sup>3</sup> ) of dry air
	Pressure drop range
	High: in. H <sub>2</sub> O Low: in. H <sub>2</sub> O
	Dew point temperature of process stream: degrees F
	Dew point temperature of process stream. degrees r
	Inlet flow rate: ACFM
<b>Dust Collection</b>	☐ Pneumatic conveyor ☐ Rotary airlock values ☐ Screw conveyors ☒ Closed container
Device	☐ Double dump ☐ Drag conveyor
	☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
Operating	Normal: 16 hours/day 5 days/week 52 weeks/year
Schedule	Maximum: hours/day days/week weeks/year



# PERMIT TO CONSTRUCT APPLICATION

Revision 0 04/02/07

		l I	ENTIFICAT	ION								
Company Name: QI	3 Corporation		Facility Na	me:		acility O No.: 059-00008						
	rief Project Permit Modification for Cyclones escription: Cyclone #8											
CYCLONE SEPARATOR INFORMATION												
Equipment Description												
Manufacturer:	HJ Burns Comp	pany, Inc.		Model Numb	oer:							
Dimensions	G	as out 1	1	Partic	ulate Size Di	stribution Data						
	Gas in		B 1	Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range						
	FRONT	IAI S	TOP	0.5-1.0								
	VIEW	VIEW	1.0-5.0									
		1		5-10								
				10-20								
		\ / ż		Over 20								
		1		Type of Cyclone	□Wet	⊠ Dry						
	Give dimensions of cyclone. (See sample diagram above.)  1. B: 5 in.  5. Z: 72 in.		i Rain Meie.	Type of Cyclone Unit	⊠ Single □ Dual	☐ Quadruple ☐ Multiclone						
	2. H: 17 in.	6. D: 36	in.	Blower	Blower horse							
	3. S:	in. 7. A: 16	in.		Design flow ra	ate: 2,223 scfm ced						
	4. L: 25 in.	8. J: 8 i	n.		SALES AND A STATE OF THE	500 - 100-10 - 100-10 - 140-10 - 140-10 - 140-10 - 140-10 - 140-10 - 140-10 - 140-10 - 140-10 - 140-10 - 140-10						
Design Criteria	Cyclone configu	uration: 🛭 Positiv	ve pressure	☐ Negative p	ressure							
Pre- Treatment Device	☐ Cyclone ☐ Precooler ☐ Preheater	☐ Knock-out ch ⊠ None	amber	Post- Treatment Device	☐ Bagh ☐ HEP/ ☐ Othe							

	Process Stream Characteristics
Brief Description of Process	
	· · · · · · · · · · · · · · · · · · ·
Flow Data	Gas stream temperature: 68 degrees F  Moisture content: grams of water/cubic feet (ft³) of dry air
	Pressure drop range High: in. H <sub>2</sub> O Low: in. H <sub>2</sub> O
	Dew point temperature of process stream: degrees F  Inlet flow rate: ACFM
Dust Collection Device	☐ Pneumatic conveyor ☐ Rotary airlock values ☐ Screw conveyors ☒ Closed container ☐ Double dump ☐ Drag conveyor
ı	☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
Operating Schedule	Normal: hours/day days/week 20 hours/yr weeks/year Maximum: hours/day days/week weeks/year



DEQ AIR QUALITY PROGRAM

1410 N. Hilton Boise, ID 83706

For assistance: (208) 373-0502

#### PERMIT TO CONSTRUCT APPLICATION

Company Name:

QB Corporation

Facility Name:

Facility ID No.:

Brief Project Description: Modify Permit To Include Cyclones

			III ACT AIGASIA		- CRITERIA POL	LUTANTS		
		1		2.	3.	4.		5.
Criteria Pollutants	Averaging Period	Significant Impact Analysis Results (µg/m3)	Significant Contribution Level (µg/m3)	Full Impact Analysis Results (µg/m3)	Background Concentration (µg/m3)	Total Ambient Impact (µg/m3)	NAAQS (µg/m3)	Percent of NAAQS
PM <sub>10</sub>	24-hour	39.37111	5	32.8053	73.00	105.81	150	70.5%
10	Annual	9.33998	1	9.3400	26.00	35.34	50	70.7%
HOWE MY	3-hr	10.49146643	25				1300	10.170
SO <sub>2</sub>	24-hr	4.490124225	5				365	
=	Annual	0.73688685	1				80	
NO <sub>2</sub>	Annual	6.48460428	1	6.4846	4.30	10.78	100	10.8%
СО	1-hr	367.8500484	2000				10000	
66	8-hr	164.276955	500				40000	

059-00008



DEQ AIR QUALITY PROGRAM 1410 N. Hilton

Boise, ID 83706

For assistance: (208) 373-0502

#### PERMIT TO CONSTRUCT APPLICATION

Company Name: QB Corporation

Facility Name:

Facility ID No.:

059-00008

Brief Project Description: Modify Permit to Include Cyclones

POINT SOURCE STACK PARAMETERS										
1.	2.	3a.	3b.	4.	5.	6.	.7	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Stack Height (m)	Modeled Diameter (m)	Stack Exit Temperature (K)	Stack Exit Flowrate (acfm)	Stack Exit Velocity (m/s)	Stack orientation (e.g., horizontal, rain cap)
Point Source(s)					No.	The state of				
Wood Fired Boiler	BLRSTK	289,873.7	4,989,972.4	1,399.7	6.10	0.610	472.04	6,485.00	10.486	Vert.
Cyclone #1 - Wood Bin	CYC1	289,880.9	4,989,947.1	1,400.0	18.06	1.676	293.15	4.68	0.001	Horz.
Cyclone #2 - Wood Bin	CYC2	289,883.0	4,989,943.7	1,400.1	14.83	1.295	293.15	2.79	0.001	Horz.
Cyclone #3 - Wood Bin	CYC3	The state of the s	4,989,940.3	1,400.1	17.07	1.245	293.15	2.58	0.001	Horz
Cyclone #4 - Truck Bin	CYC4		4,989,950.8	1,400.1	18.42	0.965	293.15	1.55	0.001	Rain Cap
Cyclone #5 - Boiler Storage	CYC5		4,989,993.7	1.399.3	12.50	1.016	293.15	1.72	0.001	Horz.
Cyclone #6 - Boiler Storage	CYC6		4,989,982.6	1,399.5	13.87	0.813	293.15	1.10	0.001	Rain Cap
Cyclone #7 - Boiler Storage	CYC7		4,989,979.7	1,399.5	12.57	0.508	293.15	0.43	0.001	Rain Cap
Cyclone #8 - Boiler Storage	CYC8		4,989,981.7	1,399.5	12.06	0.406	293.15	0.27	0.001	Rain Cap
name of the emissions unit13										
name of the emissions unit14										/
name of the emissions unit15										
name of the emissions unit16										
name of the emissions unit17										
name of the emissions unit18										
name of the emissions unit19										
name of the emissions unit20										
name of the emissions unit21										
(insert more rows as needed)										

	1410 N. Hilton Boise, ID 8370	LITY PROGRAM 06 9: (208) 373-050:	-	g:			PERM	IIT TO CON	STRUCT APP	LICATION
Company Name:	QB Corporation	Corporation								
Facility Name:										
Facility ID No.:					05	9-00008				
Brief Project Description:	Modify Permit t	o Include Cyclon	ies							
	10000		FUGITIV	E SOURCE P	ARAMETER	RS	200 000	1.50		
1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Release Helght (m)	Easterly Length (m)	Northerly Length (m)	Angle from North (°)	Initial Vertical Dimension (m)	Initial Horizontal Dimension (m)
Area Source(s)									The Real Property	
			(#Z)							
Volume Source(s)										
Dry Kiln	KILN	289,909.2	4,989,962.4	1,399.41	6.71				4.25	3.12
Target Box	TBOX	289,882.6	4,989,941.1	1,400.15	8.53				0.14	3.97
1										
1										
(insert more rows as needed)										



DEQ AIR QUALITY PROGRAM

1410 N. Hilton Boise, ID 83706

For assistance: (208) 373-0502

#### PERMIT TO CONSTRUCT APPLICATION

Company Name: QB Corporation

Facility Name:

Facility ID No.: 059-00008

Brief Project Description: Modify Permit to Include Cyclones

BUILDING AND STRUCTURE INFORMATION						
1.	2.	3.	4.	5.	6.	7.
Building ID Number	Length (ft)	Width (ft)	Base Elevation (m)	Building Height (m)	Number of Tiers	Description/Comments
LBRSHD	162.00	30.00	1399.90	6.93	1	Lumber Shed
RFBLDG	153.00	86.00	1400.17	5.41	1	
GLUE	147.00	87.00	1400.18	8.53	1	
PRESS	117.00	78.00	1399.69	6.20	1	· · · · · · · · · · · · · · · · · · ·
FINISH	177.00	60.00	1401.04	10.06	1	
NPAF	303.00	99.00	1401.79	10.82	1	New Press and Finsh
SHOP	80.00	40.00	1399.54	7.80	1	
PREGRD	105.00	103.00	1398.88	9.85	1	Lumber Pre-grade
GARG	40.00	16.00	1399.01	7.80	1	Garage
BLRHSE	40.00	24.00	1399.70	7.11	1	Boiler House
DRYKILN	56.00	30.00	1399.43	6.71	1	
OFFICE	75.00	53.00	1400.94	7.62	1	
CHIPBIN	42.00	16.00	1400.06	9.14	1	
TRKBIN	16.00	16.00	1400.11	10.67	1	Truck Bin
	_					